STATE OF MISSOURI
Matt Blunt, Governor • Doyle Childers, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.mo.gov

DEC 1 3 2006

Mr. Dodd J. Schimpf, Plant Manager
Nordyne, Inc.
2501 Boonslick Drive
Boonville, MO 65233

Re: Nordyne Inc., 053-0021
Permit Number: **OP2006-091**

Dear Mr. Schimpf:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important you read and understand the requirements contained in your permit.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program at (573) 751-4817, or you may write to the Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102. Thank you for your time and consideration.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS: csk

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII
Ms. Abbie Stockett, Northeast Regional Office
PAMS File: 2004-08-040

Missouri Department of Natural Resources
Air Pollution Control Program

INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Intermediate Operating Permit Number: **OP2006-091**
Expiration Date: DEC 1 2 2011
Installation ID: 053-0021
Project Number: 2004-08-040

Installation Name and Address
Nordyne, Inc.
2501 Boonslick Drive
Boonville, MO 65233
Cooper County

Parent Company's Name and Address
Nortek, Inc.
50 Kennedy Plaza
Providence, RI 02903

Installation Description:
Nordyne Inc. manufactures heating, ventilation and air conditioning (HVAC) equipment. Sources of air pollutants include: hydraulic and mechanical presses, lubrication systems, hand-held and automatic brazers, touch-up painting stations, solvent wipe cleaning stations, adhesive application stations, and combustion testing stations.

DEC 1 3 2006
Effective Date

Steven Fuller for JLK
Director or Designee
Department of Natural Resources

Table of Contents

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Nordyne Inc. manufactures heating, ventilation and air conditioning (HVAC) equipment. Nordyne has other installations similar to this one in Boonville.

Aluminum sheet stock is delivered to the plant in large rolls. High-speed presses cut and press the aluminum to fin specifications. During this process, the aluminum is lightly lubricated with evaporative lubricating oil (EP-18) which contains volatile organic compounds (VOC). Prefabricated copper tubing is threaded through fins. Curved copper tube return bends are brazed to the tubes (EP-03). Components are assembled to make finished HVAC equipment. Components come pre-painted, but some touch-up painting is done (EP-17) with VOC-containing paint. A citrus mold cleaner is used as a final wipe solvent (EP-19). After furnaces are assembled, their fuel combustion is tested.

Sources of air pollutants include: hydraulic and mechanical presses, lubrication systems, hand-held and automatic brazers, touch-up painting stations, solvent wipe cleaning stations, adhesive application stations, and combustion testing stations.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO_x)	Nitrogen Oxides (NO_x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2005	0.46	0.00	0.39	49.40	0.33	-	0.38
2004	0.44	-	0.35	43.72	0.29	-	0.54
2003	0.04	-	0.51	44.51	0.43	-	-
2002	-	-	-	46.50	-	-	-
2001	-	-	-	47.75	-	-	-

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit	EP #
	Adhesive Application Stations	
EU0010	Seven Adhesive Application Stations, fugitive	EP-16
	Evaporative Lubricating Oil Use	
EU0020	Two Fin (High Speed Punch) Presses, 1995, 1996	EP-18
EU0030	Fin (High Speed Punch) Press 13301	EP-18
EU0040	Hydraulic Press P33 Lien Chien	EP-18
EU0050	12 Tube Hairpin Bender	EP-18
EU0060	Toggle Press, Side-Top-Side	EP-18
EU0070	Toggle Press, Back-Bottoms	EP-18
EU0080	Hairpin Press, 7-pin 33195	EP-18
EU0090	Hairpin Press, 7-pin 33198	EP-18

	MIG WireWelders	
EU0100	Six MIG Wire Welders	EP-20
EU0110	Eight MIG Wire Welders	EP-22
	Furnace Final Testing Station	
EU0120	Furnace Final Testing Station	EP-22
	Indirect Heating Units	
EU0130	Eighty-three Space Heaters	None
EU0140	Water Heater in South Mop Room	None
EU0150	Water Heater in Northwest Storage Area	None
EU0160	Two Water Heaters Above Front Office	None

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source	EP #
Auto brazer, natural gas, 2.0 MMBtu/hr	EP-03
Twenty-six hand-held brazers, natural gas, 0.0816 MMBtu each	EP-03
Three touch up paint stations, fugitive	EP-17
Three solvent wipe stations, fugitive	EP-19
Auto brazer, A-Coil Line – AB01, natural gas, 1.575 MMBtu	EP-21
Four arc welders	EP-22
Three fuel combustion testing stations, natural gas, 0.14 MMBtu/hr each	EP-23
Three hot surface igniter testers, natural gas, 0.14 MMBtu/hr	EP-23
Thirty-five presses using no evaporative oil	None
Twenty-five resistance welders (four seam, nineteen spot, and two stud), fugitive	None
Coil leak test using helium gas	None
Foam packaging machine, fugitive	None
Non-presses using no evaporative oil (formers/rollers for pipes, seams, and locks; swedgers; and flue flare)	None
Two air handlers, natural gas, 2.5 MMBtu/hr	None
Two air handlers, natural gas, 1.9 MMBtu/hr	None

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.
None.

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 – ADHESIVE APPLICATION STATIONS			
Emission Unit	Description	Manufacturer/Model/Serial #	EIQ #
EU0010	Seven Adhesive Application Stations, fugitive, installed 2004	Various	None

PERMIT CONDITION EU0010-001

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitations:

1) The permittee shall not cause or permit emissions to be discharged into the atmosphere from the Seven Adhesive Application Stations (EU0010) any visible emissions with an opacity greater than 20%.
2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

Monitoring:

1) The permittee shall conduct opacity readings on all stack(s) from which emissions from these stations vent to the atmosphere, using the procedures contained in Test Method 22 in Appendix A of 40 CFR Part 60. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when one or more stations are operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. When visible emissions are perceived or believed to exceed the applicable opacity standard, the source representative would then conduct an observation using the procedures contained in Test Method 9 in Appendix A of 40 CFR Part 60.
2) The following monitoring schedule must be maintained:
   a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then –
   b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then –
   c) Observations must be made semi-annually. If a violation is noted, monitoring reverts to weekly.

   If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

Recordkeeping:

1) The permittee shall maintain records of all Method 22 observation results (See Attachment A1 or A2.), noting:
   a) Whether any air emissions (except for water vapor) were visible from the emission units,
   b) All emission units from which visible emissions occurred, and
   c) Whether the visible emissions were normal for the process.
2) The permittee shall maintain records of any equipment malfunctions that result in visible emissions. (See Attachment B.)
3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (See Attachment C.)
4) Attachments A1, A2, B, and C are forms satisfying these recordkeeping requirements. These forms or equivalents created by the permittee must be used to certify compliance with this requirement.
5) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
6) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

Reporting:

1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determines, using the Method 9 test, that the emission unit(s) exceeded the opacity limit.
2) The permittee shall report any deviations from the monitoring, recordkeeping and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

EU0020 THROUGH EU0090 – EVAPORATIVE LUBRICATING OIL USE			
Emission Unit	Description	Manufacturer/ Model #/Serial #	EIQ #
EU0020	Two Fin (High-Speed Punch) Presses: MHDR 1.625 gal evaporative oil/hr each; fugitive; installed 1995 and 1996	Burr Oak Tool/ FP-3B-54	EP-18
EU0030	Fin (High Speed Punch) Press 13301: MHDR 1.2 gal evaporative oil/hr; fugitive; installed 2004	Burr Oak Tool/ FP-3-54-1398	
EU0040	Hydraulic Press P33 Lien Chien: MHDR 0.256 gal/hr; fugitive; installed 2004	Sutherland Press/ LPD-500	
EU0050	12 Tube Hairpin Bender: MHDR 0.2 gal evaporative oil/hr; fugitive; installed 2004	Burr Oak Tool	
EU0060	Toggle Press, Side-Top-Side: MHDR 0.256 gal evaporative oil/hr; fugitive; installed 2004	Detroit Tool/ 11900SE01-03	
EU0070	Toggle Press, Back-Bottoms; MHDR 0.256 gal evaporative oil/hr; fugitive; installed 2004	Detroit Tool 119003	
EU0080	Hairpin Press, 7-pin 33195; MHDR 0.1 gal evaporative fuel/hr; fugitive; installed 2004	Burr Oak Tool/ VBHB-M7-10-6LH/ 011492	
EU0090	Hairpin Press, 7-pin 33198; MHDR 0.1 gal evaporative fuel/hr; fugitive; installed 2004	Burr Oak Tool/ VBHB-M-10-14LH	

PERMIT CONDITION (EU0020 THROUGH EU0090)-001

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

Emission Limitation:

The permittee shall emit less than 87 tons of volatile organic compounds (VOC) in any consecutive 12-month period from emission units EU0020 through EU0090.

Monitoring/Recordkeeping:

1) The permittee shall maintain an accurate record of VOC emitted into the atmosphere from these units.
2) Attachment D contains a log including these recordkeeping requirements. This log, or an equivalent form created by the permittee, must be used to certify compliance with this requirement.
3) These records shall be maintained for five (5) years. They shall be kept onsite for at least two (2) years. They may be kept in either hard-copy form or on computer media.
4) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon their verbal request and presentation of identification.
5) Attachment E demonstrates that, as long as the conditions of this permit are met, the installation will emit less than 100 tons VOC per year, which will keep it below the Part 70 threshold. Attachment E is part of this permit, and the permittee shall keep it with the rest of this permit.

Reporting:

1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records indicate the source exceeds the emission limitation..
2) The permittee shall report any deviations from the monitoring, recordkeeping and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

EU0100 AND EU0110 – MIG WIRE WELDERS			
Emission Unit	Description	Manufacturer/Model/Serial #	EIQ #
EU0100	Six MIG Wire Welders, MHDR of 4.3 lb welding wire/hr per welder, stack flow rate of 14,000 ft^3/min, installed 2004	Various	EP-20
EU0110	Eight MIG Wire Welders, MHDR of 4.3 lb welding wire/hr per welder, stack flow rate of 9,000 ft^3/min, installed 2004	Various	EP-22

PERMIT CONDITION (EU0100 AND EU0110)-001

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

Emission Limitations:

1) Particulate matter may not be emitted from the Six MIG Wire Welders (EU0100) in excess of 0.082 grains per standard cubic foot of exhaust gas. This emission rate was interpolated from Table 1 in §(3)(A)2 of the regulation.
2) Particulate matter may not be emitted from the Eight MIG Wire Welders (EU0110) in excess of 0.092 grains per standard cubic foot of exhaust gas. This emission rate was taken from Table 1 in §(3)(A)2 of the regulation.

Monitoring/Recordkeeping/Reporting:

1) Attachments F and G contains potential to emit calculations demonstrating that the above emission limitations will never be exceeded. Attachments F and G are part of this permit, and the permittee shall keep them with the rest of this permit.
2) Attachments F and G shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

EU0120 – FURNACE FINAL TESTING STATION			
Emission Unit	Description	Manufacturer/Model/Serial #	EIQ #
EU0120	Furnace Final Testing Station, 0.14MMBtu, installation date unknown	Unknown	EP-22

PERMIT CONDITION EU0120-001

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

Emission Limitations:

1) Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO_2)	0.03 parts per million (ppm) (80 micrograms per cubic meter ($\mu g/m^3$))	Annual arithmetic mean
	0.14 ppm (365 $\mu g/m^3$)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu g/m^3$)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H_2S)	0.05 ppm (70 $\mu g/m^3$)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu g/m^3$)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H_2SO_4)	10 $\mu g/m^3$	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 $\mu g/m^3$	1-hour average not to be exceeded more than once in any 2 consecutive days

Operational Limitation:

This emission unit shall be limited to burning pipeline grade natural gas, fuel oil with a sulfur content of 0.5 percent by weight or less, or any combination of these two fuels.

Monitoring/Recordkeeping:

1) The permittee shall maintain an accurate record of the sulfur content of fuel used in this emission unit. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
2) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
3) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

Reporting:

1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after determining that the installation failed to meet the operational limitations in this permit condition.
2) The permittee shall report any deviations from the monitoring, recordkeeping and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

EU0130 THROUGH EU0160 – INDIRECT HEATING UNITS			
Emission Unit	Description	Manufacturer/Model #	EIQ #
EU0130	Eighty-three Space Heaters, natural gas, thirty-five at 0.1 MMBtu/hr each and forty-eight at 0.05 MMBtu/hr each	Unknown	None
EU0140	Water Heater in South Mop Room, 0.034 MMBtu/hr	Unknown	None
EU0150	Water Heater in Northwest Storage Area, 0.03 MMBtu/hr	Unknown	None
EU0160	Two Water Heaters Above Front Office, 0.12 MMBtu/hr	Unknown	None

PERMIT CONDITION (EU0130 THROUGH EU0160) - 001

10 CSR 10-3.060, Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limitations:

The permittee shall not emit particulate matter from the space heaters and water heaters (EU0130 through EU0160) in excess of 0.46 pounds per MMBtu. The calculation of this limitation is shown in Attachment H.

Operational Limitation

These emission units shall be limited to burning natural gas.

Monitoring/Recordkeeping/Reporting:

1) The permittee shall maintain documentation supporting that the fuel used in these emission units is natural gas.
2) The permittee will be in compliance with this regulation as long these emission units burn only natural gas. Calculations demonstrating this are in Attachment H. Attachment H is part of this permit, and the permittee shall keep it with the rest of this permit.

IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
   a) Name and location of installation;
   b) Name and telephone number of person responsible for the installation;
   c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
   d) Identity of the equipment causing the excess emissions;
   e) Time and duration of the period of excess emissions;
   f) Cause of the excess emissions;
   g) Air pollutants involved;
   h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
   a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
   b) Paving or frequent cleaning of roads, driveways and parking lots;
   c) Application of dust-free surfaces;
   d) Application of water; and
   e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. Qualified personnel shall perform all tests.
2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.030 Open Burning Restrictions

1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
   a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
   b) The schedule of burning operations;
   c) The exact location where open burning will be used to dispose of the trade wastes;
   d) Reasons why no method other than open burning is feasible; and
   e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Nordyne Inc. from the provisions of any other law, ordinance or regulation.
5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. **This requirement is not federally enforceable.**

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
   d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
   e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
   f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
   c) Any other monitoring methods approved by the director.
2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
   a) Monitoring methods outlined in 40 CFR Part 64;
   b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
   c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a) Applicable monitoring or testing methods, cited in:
      i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
      ii) 10 CSR 10-6.040, "Reference Methods";
      iii) 10 CSR 10-6.070, "New Source Performance Standards";
      iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
   b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements

1) Recordkeeping
   a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
   b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
2) Reporting
   a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
   b) The permittee shall submit a report of all required monitoring by:
      i) April 1st for monitoring which covers the January through December time period.
      ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
   c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
   d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
      i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
      ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.

f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

1) June 21, 1999;
2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(5)(C)1.A General Requirements

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios

None

10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B, and §(6)(C)3.D, and §(5)(C)3, §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements

1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
   a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
   b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
3) All progress reports required under an applicable schedule of compliance shall be submitted annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
   c) Whether compliance was continuous or intermittent;
   d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
   e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions

1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions

limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
b) That the installation was being operated properly,
c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(5)(C)5 Off-Permit Changes

1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
   b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
   c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Dodd J. Schimpf, Plant Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:

1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
   a) The permit has a remaining term of less than three years;
   b) The effective date of the requirement is later than the date on which the permit is due to expire; or
   c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

ATTACHMENT A1

Method 22 Opacity Emission Observations For EU_______________				
Date	Method 22 Test Observer	Visible Emissions (yes/no)	Emissions normal? (yes/no)	If Visible emissions, was a method 9 done? (yes/no)

ATTACHMENT A2

Method 22 (Outdoor Observation Log)	
Emission Unit	
Observer	Date
Sky Conditions	
Precipitation	
Wind Direction	Wind Speed
Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.	

Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		

ATTACHMENT B
Inspection/Maintenance/Repair/Malfunction Log

Date	Equipment/Emission Unit	Activities Performed

ATTACHMENT C

Method 9 Opacity Emission Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Min.	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ % opacity.
Was the emission unit in compliance at the time of evaluation? ____ ___ _____
YES NO Signature of Observer

ATTACHMENT D
Monthly VOC Tracking Record

For month of_____, year of_____

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

Column 1	Column 2	Column 3	Column 4	Column 5
Material Used[1] (Name, type)	Amount of Material Used (include units)	Density[2] (lb/gal)	VOC Content by Weight (%)	VOC Emission (tons)
(b) Monthly VOC emissions (sum of [Column 5]), in tons:				
(c) 12-month VOC emissions total (e) from worksheet A for last month, in tons:				
(d) Monthly VOC emissions (b) from worksheet A for same month last year , in tons				
(e) 12-month VOC emissions total, in tons ([Column b] + Column c] – [Column d])				

Notes

1: If more than twelve VOC-containing materials are used in a single month, fill out more than one worksheet page, but only fill out total lines (b) through (e) on final page.

2: Density, [Column 3], is not needed if Amount of Material Used, [Column 2], is in pounds or tons.

Instructions

(a) Choose appropriate VOC calculation method for units used:
  1) If Amount of Material Used is in tons, then [Column 5] =[Column 2] x [Column 4].
  2) If it is in pounds, then [Column 5] = [Column 2] x [Column 4] x [0.0005].
  3) If it is in gallons, then [Column 5] = [Column 2] x [Column 3] x [Column 4] x [0.0005].

(b) Sum [Column 5].

(c) Copy the 12-month VOC emissions total (e) from worksheet for last month, in tons.

(d) Copy the monthly VOC emissions (b) from worksheet for same month last year, in tons.

(e) Calculate the new 12-month VOC emissions total. As a check, this should equal the sum of the monthly VOC emissions (b) for this month and the previous eleven months.

A 12-month VOC emissions total (e) of less than 87.0 tons indicates compliance.

ATTACHMENT E
Demonstration That Installation Is Under Part 70 Volatile Organic Compound Limit (100 tons/yr)
Page 1 of 2

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

The table below demonstrates that as long as the installation is in compliance with the conditions of this permit, its potential to emit Volatile Organic Compounds (VOC) is 95.57 tons/yr. This is below the Part 70 threshold of 100 tons/yr.

ID #	Description	Maximum Hourly Design Rate (MHDR)	VOC Emission Factor (EF)	VOC Emissions (tons/yr)
EU0010	7 Adhesive Application Stations	4.48 gal/hr [1]	0.005 lb/gal [2]	0.10 [3]
EU0020 - EU0090	Evaporative Lubricating Oil Use	Voluntary limitation		87.00
EU0120	Furnace Final Testing Station, distillate fuel oil, 0.14 MMBtu/hr	0.0012×10^3 gal/hr [4]	0.556 lb/10^3gal [5]	0.00 [3]
EU0130 – EU0160	Indirect Heating Units, natural gas, 35 at 0.1 MMBtu/hr and 48 at 0.05 MMBtu/hr	0.0056×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.13 [3]
None	Auto brazer, natural gas, 2.0 MMBtu/hr	0.0019×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.05 [3]
None	26 hand held brazers, natural gas, 0.0816 MMBtu/hr each	0.0020×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.05 [3]
None	Auto brazer, A-Coil Line, natural gas, 1.575 MMBtu/hr	0.0015×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.04 [3]
None	3 touch up paint stations	0.055 gal/hr	3.22 lb/gal [2]	0.78 [3]
None	3 solvent wipe stations	0.25 gal/hr	6.58 lb/gal [2]	7.21 [3]
None	2 air handlers, natural gas, 2.5 MMBtu/hr each	0.0048×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.12 [3]
None	2 air handlers, natural gas, 1.9 MMBtu/hr each	0.0036×10^6 scf/hr [6]	5.5 lb/10^6 scf [7]	0.09 [3]
			Total	95.57

Notes:
1. MHDR = 0.64 gal/hr per station X 7 stations = 4.48 gal/hr
2. Emission factors for 7 Adhesive Application Stations, 3 touch up paint stations, and 3 solvent wipe stations are from permit application.
3. VOC Emissions = MHDR X EF X (0.0005 ton/lb) X (8760 hr/yr)

Notes continue on next page.

ATTACHMENT E
Demonstration That Installation Is Under Part 70 Volatile Organic Compound Limit (100 tons/yr)
Page 2 of 2

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

Notes, continued:

4. MHDR in 10^3gal/hr = $\left(\frac{0.14 MMBtu}{hr}\right)\left(\frac{bblFuelOil}{5.9 MMBtu}\right)\left(\frac{50 galFuelOil}{bblFuelOil}\right)\left(\frac{10^3}{10^3}\right) = 0.0012 X 10^3\ gal/hr$

   Note that the barrel used in this calculation is the U. S. petroleum barrel of 50 gallons, not the usual U. S. liquid barrel of 31.5 Gallons.
5. Emission factor for Furnace Final Testing Station is from Table 1.3-3 in U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition. The figure for distillate fuel oil combustion, is used instead of the one for natural gas combustion, because it gives higher results. TOC is used instead of VOC, but errs on the high side.
6. MHDR in 10^6scf/hr = $(NumberofUnits)\left(\frac{UnitMMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)$
7. Emission factor for brazers and Indirect Heating Units (natural gas combustion) is from Table 1.4-2 in U.S. EPA document AP-42.

ATTACHMENT F
Demonstration of Compliance With Permit Condition (EU0100 AND EU0110) - 001

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

This attachment may be used to demonstrate that emission unit EU0100 is in compliance with Permit Condition (EU0100 AND EU0110) - 001, which contains the requirements of regulation 10 CSR 6.400, *Restriction of Emission of Particulate Matter From Industrial Processes.*

The emission limitation for this permit condition is 0.082 gr PM/scf exhaust gas.

The total Maximum Hourly Design Rate for each of these identical welders is 4.3 lb welding wire/hr. The emission factor for cored wire, non-gas shielded welding, taken from American Welding Society document *Guide for Estimating Welding Emissions for EPA and Ventilation Permit Reporting*, is 3.5% of consumables. Calculate emissions in pounds PM per hour for the welders as follows.

$$E = (6)\left(\frac{4.3 lb Welding Wire}{hr}\right)\left(\frac{3.5 lb PM}{100 lb Welding Wire}\right) = 0.90 lb PM / hr$$

The stack flow rate is 14,000 ft^3/min. Calculate emissions in grains per cubic foot as follows.

$$E = \left(\frac{0.90 lb PM}{hr}\right)\left(\frac{7000 grains}{lb}\right)\left(\frac{hr}{60 \min}\right)\left(\frac{\min}{14000 ft^3}\right) = 0.0075 gr PM / ft^3$$

Combining this with the other emissions through this stack, which come from the Eight MIG Wire Welders (See Attachments F) and the four arc welders (See item 6) in the *Reasons for Listing Emission Units as Without Limitations* portion of the Statement of Basis) gives the following total.

$$E = 0.0075 gr PM / ft^3 + 0.016 gr PM / ft^3 + 0.0030 gr PM / ft^3 = 0.027 gr PM / ft^3$$

The potential PM emission rate is less than the allowable emission rate. Therefore this emission unit will always be in compliance.

ATTACHMENT G
Demonstration of Compliance With Permit Condition (EU0100 AND EU0110) - 001

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

This attachment may be used to demonstrate that emission unit EU0110 is in compliance with Permit Condition (EU0100 AND EU0110) - 001, which contains the requirements of regulation 10 CSR 6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*.

The emission limitations for this permit condition are 0.092 gr PM/scf exhaust gas.

The total Maximum Hourly Design Rate for each of these identical welders is 4.3 lb welding wire/hr. The emission factor for cored wire, non-gas shielded welding, taken from American Welding Society document *Guide for Estimating Welding Emissions for EPA and Ventilation Permit Reporting*, is 3.5% of consumables. Calculate emissions in pounds PM per hour for the welders as follows.

$$E = (8)\left(\frac{4.3 lb Welding Wire}{hr}\right)\left(\frac{3.5 lb PM}{100 lb Welding Wire}\right) = 1.2 lb PM / hr$$

The stack flow rate is 9,000 ft^3/min. Calculate emissions in grains per cubic foot as follows.

$$E = \left(\frac{1.2 lb PM}{hr}\right)\left(\frac{7000 grains}{lb}\right)\left(\frac{hr}{60 \min}\right)\left(\frac{\min}{9000 ft^3}\right) = 0.016 gr PM / ft^3$$

Combining this with the other emissions through this stack, which come from the Eight MIG Wire Welders (See Attachments F) and the four arc welders (See item 6) in the *Reasons for Listing Emission Units as Without Limitations* portion of the Statement of Basis) gives the following total.

$$E = 0.0075 gr PM / ft^3 + 0.016 gr PM / ft^3 + 0.0030 gr PM / ft^3 = 0.027 gr PM / ft^3$$

The potential PM emission rate is less than the allowable emission rate. Therefore this emission unit will always be in compliance.

ATTACHMENT H
Demonstration of Compliance With Permit Condition (EU0130 THROUGH EU0160)-001
Page 1 of 2

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

This attachment may be used to demonstrate that emission units EU0130 through EU0160 are in compliance with Permit Condition (EU0130 THROUGH EU0160) - 001, which contains the requirements of regulation 10 CSR 3.060, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*, as long as they burn natural gas.

The PM emission limit in this regulation is based on the total heat input ratings, in MMBtu/hr, of all fuel burning units at the installation and on whether these units are existing or new. The total heat input, Q, of all fuel burning units at this installation is as follows.

0.14 MMBtu/hr — Furnace Final Testing Station (EU0120)
3.5 MMBtu/hr — Thirty-five of Eighty-three Space Heaters at 0.1 MMBtu/hr each (EU0130)
2.4 MMBtu/hr — Forty-eight of Eighty-three Space Heaters at 0.05 MMBtu/hr each (EU0140)
0.034 MMBtu/hr — Water Heater in South Mop Room (EU0130)
0.03 MMBtu/hr — Water Heater in Northwest Storage Area (EU0150)
0.240 MMBtu/hr — Two Water Heaters Above Front Office at 0.120 MMBtu/hr each (EU0160)
2. MMBtu/hr — Auto brazer
2.12 MMBtu/hr — Twenty-six hand-held brazers at 0.0816 MMBtu/hr each
1.575 MMBtu/hr — Auto brazer, A-Coil Line
0.42 MMBtu/hr — Three fuel combustion testing stations of 0.14 MMBtu/hr each
0.42 MMBtu/hr — Three hot surface igniter testers of 0.14 MMBtu/hr each
5.0 MMBtu/hr — Two air handlers of 2.5 MMBtu/hr each
3.8 MMBtu/hr — Two air handlers of 1.9 MMBtu/hr each
22 MMBtu/hr

At least some of the heaters were probably installed after February 15, 1971, so they will be treated as new for the purposes of this regulation. The regulation is more stringent for new equipment, so meeting the requirements for new equipment guarantees that the requirements will be met for old equipment too.

10 CSR 10-3.060(5)(B) contains an equation for determining the applicable PM emission limit for new indirect heating sources at an installation when the total heat input for indirect sources is between 10 MMBtu/hr and 2,000 MMBtu/hr:

$E = 1.31(Q)^{-0.338} = 1.31(22)^{-0.338} = 0.46$ lb PM/MMBtu

where

E = maximum allowable emission rate in pounds per million Btu of heat input, rounded off to two decimal places, and

Q = installation heat input in millions of Btu per hour.

The space heaters and water heaters (EU0130 through EU0160 have a combined heat input of 6.2 MMBtu/hr, so their allowable emission rate is 2.85 lb PM/hr.

ATTACHMENT H
Demonstration of Compliance With Permit Condition (EU0130 THROUGH EU0160)-001
Page 2 of 2

Company Name: Nordyne Inc.
Installation Location: 2501 Boonslick Dr., Boonville, MO 65233 Cooper County Installation ID: 053-0021

Table 1.4.2 in U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition, gives the PM emission factor for natural gas combustion as 7.6 pounds per 10^6 ft^3. The heating value of natural gas is 1050 Btu/scf. Calculate the PM emissions for the space heaters and water heaters as follows.

$$E = (35)\left(\frac{0.1MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM}{10^6 scfNaturalGas}\right)+$$
$$(48)\left(\frac{0.05MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM}{10^6 scfNaturalGas}\right)+$$
$$\left(\frac{0.034MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM}{10^6 scfNaturalGas}\right)+$$
$$\left(\frac{0.03MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM}{10^6 scfNaturalGas}\right)+$$
$$(2)\left(\frac{0.120MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM}{10^6 scfNaturalGas}\right) = 0.045lbPM/hr$$

The potential PM emission rate of 0.045 lb PM/hr is much less than the allowable emission rate of 2.85 lb/PM/hr. Therefore these emission units will be in compliance as long as they burn natural gas.

STATEMENT OF BASIS

Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Intermediate Operating Permit Application, received August 13, 2004
2) 2005 Emissions Inventory Questionnaire, received March 17, 2006
3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
4) Construction Permit 0593-009, issued May 26, 1993, revised July 5, 1994.
5) Construction Permit 0994-009, issued August 15, 1994, revised October 17, 1995.
6) "No Permit Required" letter issued on April 18, 1995
7) Operating Permit OP2000-007, issued March 23, 2000.
8) Construction Permit 0698-027 was issued on May 26, 1998.
9) Construction Permit 0599-017, issued April 23, 1999, revised April 7, 2004.
10) Construction Permit 032004-008, issued February 6, 2004.

See the "Construction Permit Revisions" portion of this Statement of Basis for explanations of why the construction permits were not incorporated by reference.

Historical Notes on Emission Units

The following historical notes explain the differences between the emission units and limitations in this operating permit, the previous operating permit and the EIQs for this installation.

1) Construction Permit 0593-009 was issued on May 26, 1993 for the following equipment.
   Open top vapor degreaser
   Powder paint system with 10 MMBtu/hr water heater, 1 MMBtu/hr curing oven, and 0.5 MMBtu/hr dryoff oven

   This permit restricted solvent usage at the installation to 5,000 gallons in any consecutive 12-month period. It was revised on July 5, 1994 to clarify that only solvent use in the degreaser was counted. This permit stated that the installation originally contained the following equipment
   Wet paint system with two paint burnoff ovens
   Brazing station

   It also stated that the installation expected the new powder paint system to replace the old wet paint system.

2) Construction Permit 0994-009 was issued on August 15, 1994 for the following equipment.
   Paint surface coating booth
   Paint drying oven
   Auto brazer
   This permit restricted coating material applied to 11,300 gallons per 12-month rolling period and coating material cured to the equivalent amount, 50 tons per 12-month rolling period, for the entire installation. It was revised on October 17, 1995 to restrict VOC emission to 40 tons per 12-month rolling period for the new paint booth, instead of restricting installation wide applied/cured amounts of paint. This permit also stated that Nordyne was planning to discontinue its solvent based paint system and manual brazing, the grandfathered equipment mentioned in Construction Permit 0593-009. It also stated that the surface coating was for metal coils, and New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart TT applied.

3) A "no permit required" letter was issued on April 18, 1995 for the following equipment.
   Gas pack test, consisting of two gas leak test units, 0.122 MMBtu/hr

4) Operating Permit 2000-007 was issued on March 23, 2000 for the following equipment.
   Aerosol touchup paint application, installed 1979
   Two natural gas or propane fired Auto Brazers (1.8 MMBtu/hr, each)
   One natural gas or propane fired Auto Brazer (2.0 MMBtu/hr)
   Gas pack test (0.122 MMBtu/hr)
   Hand held brazing torches (<1.0 MMBtu/hr each)
   Natural gas or propane fired space heaters (97 each < 10 MMBtu/hr)
   Spray adhesive application (water-based adhesive), installed 1979
   Four high-speed punch presses, installed 1993, 1995, 1996, 1999
   South mop room water h eater (0.034 MMBtu/hr)
   Northwest storage water heater (0.03 MMBtu/hr)
   Two above front office water heaters (0.120 MMBtu/hr each)
   Gas fired air handler (3 MMBtu/hr)
   All of these were listed as emission units without limitations. No special limitations were imposed, only core and general permit requirements. No construction permits or other documents were incorporated by reference, but Construction Permits 0593-009, 0994-009 (amended), 0698-027, and 0599-017 were relied on in its preparation. It also states that the following equipment had been dismantled.
   Vapor degreaser (EP-02)
   Six brazing wheels, 1MMBtu/hr each (EP-03)
   Ethyleneglycol storage tank (EP-04)
   Boiler for powdered paint pretreatment (EP-09)
   Surface coating pretreatment (EP-10)
   Surface coating curing oven, 3 MMBtu/hr (EP-11)
   Burn-off oven (EP-12)
   Wet paint surface coating (EP-13)
   Wet paint curing oven, 1.5 MMBtu/hr (EP-14)
   Powder cure oven, 2 MMBtu/hr (EP-14)
   Two burn-off ovens, 0.3 MMBtu/hr each (EP-14)

Most of the equipment removed had been permitted by Construction Permits 0593-009 and 0994-009. The equipment removed included all the metal coil surface coating equipment that was subject to NSPS 40 CFR Part 60 Subpart TT.

5) Construction Permit 0698-027 was issued on May 26, 1998, after the fact, for the following equipment.
   Three fin (high speed punch) presses, installed 1993, 1995, 1996
   This permit imposed no special conditions. It stated that the three fin presses permitted were the only ones in use at the installation at the time. It also stated that the following equipment had been removed.
   Open top vapor degreaser, permitted by Construction Permit 0593-009

6) Construction Permit 0599-017 was issued on April 23, 1999 for the following equipment.
   Fin (high speed punch) press, installed 1999
   Auto brazer, 1.5 MMBtu/hr
   This permit imposed no special conditions. It was revised on April 7, 2004 to clarify that there were emissions from twenty-six hand held brazing units and the 2.0 MMBtu/hr auto brazer.

7) Construction Permit 032004-008 was issued February 6, 2004. It removed the following equipment.
   Fin (high speed punch) press, installed 1999, permitted by Construction Permit 0599-017
   Fin (high speed punch) press, installed 1993, permitted by Construction Permit 0698-027
   Two auto brazers, natural gas or propane fired, 1.8 MMBtu/hr each
   Two gas leak test units, 0.122 MMBtu/hr, per "no permit required" letter
   Fourteen space heaters
   It modified the following equipment.
   Aerosol touchup paint application, installed in 1979, had one touchup paint station added and one removed, giving three
   Spray adhesive application (water-based adhesive), installed 1979, was removed and replaced by seven adhesive application stations
   Final cleaning of product had one final cleaning solvent wipe station added and one removed, giving three
   It added the following equipment.
   Fin (high speed punch) press 13301
   Hydraulic press P33 Lien Chien
   12-tube hairpin bender
   Toggle press side-top-side
   Toggle press back-bottoms
   7-tube hairpin press 33195
   7-tube hairpin press 33198
   Fourteen MIG wire welders
   Auto brazer A-Coil Line - AB01, natural gas, 1.575 MMBtu/hr
   Four arc welders
   Foam packaging machine
   Twenty-five resistance welding stations
   Three fuel combustion testing stations, natural gas, 0.14 MMBtu/hr each
   One furnace final test station, natural gas and fuel oil, 0.14 MMBtu/hr
   Three hot surface igniter testers, natural gas, 0.14 MMBtu/hr each

Twenty-five presses using no evaporative lubricating oil
Coil leak test using helium gas
Floor cleaning activities
Maintenance (non-production related) welding

8) The application for this permit gave more details on the changes made by Construction Permit 032004-008 and also specified the following changes.
Gas fired air handler, 3 MMBtu/hr, changed to two gas fired air handlers, 2.5 MMBtu/hr plus two gas fired air handlers, 1.9 MMBtu/hr
Non-presses using no evaporative lubricating oil (formers/rollers for pipes, seams, and locks, swedgers, and flue flare) added

Reasons for Listing Emission Units as Without Limitations
The following are in the list of "Emission Units Without Limitations" for the following reasons. Also, the installation has "activities not required to be listed", including floor cleaning activities and maintenance (non-production) welding.

1) Auto brazer, natural gas, 2.0 MMBtu/hr (EP-03)
The Maximum Hourly Design Rate for this auto brazer is 2.0 MMBtu/hr natural gas, 15 lb brazing rings/hr, and 0.23 gal liquid brazing flux/hr. It can emit PM_{10} from natural gas consumption (combustion emissions) and from brazing ring consumption (process emissions). The liquid brazing flux used is The Gasflux Company's Type "W" Liquid Gasflux. According to the manufacturer, the product burns off completely during use, so it is ignored in these calculations.

Combustion Emission Factor for natural gas = 7.6 lb PM_{10} / 10^6 scf [From Table 1.4-2 in U.S. EPA document AP-42]
Heating Value of natural gas = 1050 Btu/scf.
Combustion PM_{10} PTE =

$$\left(\frac{2.0 MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)\left(\frac{7.6 lbPM_{10}}{10^6 scfNaturalGas}\right) = 0.014 lb/hr$$

Process Emission Factor for brazing rings = 0.028 lb PM_{10} / lb brazing rings [This assumes that 2.8% of brazing ring mass turns to fumes, and is based on American Welding Society Document "Guide for Estimating Welding Emission for EPA and Ventilation Permit Reporting".]

Process PM_{10} PTE for brazing rings = $\left(\frac{15 lbBrazingRings}{hr}\right)\left(\frac{0.028 lbPM_{10}}{lbBrazingRing}\right) = 0.42 lb/hr$

Total PM_{10} PTE = 0.014 lb/hr + 0.42 lb/hr = 0.43 lb/hr

The total PM_{10} PTE is less than 0.5 lb/hr, so this auto brazer is exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation. The flow rate through the stack for this unit is unknown, but that for a similar unit at Nordyne's Poplar Bluff installation is 3500 ft^3/min. Even assuming a flow rate that is only 10% of the other installations, or 350 ft^3/min, gives an emission of

$$E = \left(\frac{0.43 lbPM}{hr}\right)\left(\frac{7000 grains}{lb}\right)\left(\frac{hr}{60\min}\right)\left(\frac{\min}{350 ft^3}\right) = 0.14 grainPM / ft^3$$

With particulate emissions this low, it is reasonable to assume that this auto brazer will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to it either.

Since this auto brazer burns natural gas exclusively, it is exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from this auto brazer are included in Attachment E calculations of total VOC emissions for the installation.

2) Twenty-six hand held brazers, natural gas, 0.0816 MMBtu/hr each (EP-03)
The Maximum Hourly Design Rate for each of these brazers is 0.0816 MMBtu natural gas/hr and 0.11 lb brazing rods/hr. They can emit PM_{10} from natural gas consumption (combustion emissions) and from brazing rod consumption (process emissions).

Combustion Emission Factor for natural gas = 7.6 lb PM_{10} / 10^6 scf natural gas [Same as for auto brazer in Item 1 above]
Heating Value of natural gas = 1050 Btu/scf.
Combustion PM_{10} PTE =

$$(26)\left(\frac{0.0816 MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)\left(\frac{7.6 lbPM_{10}}{10^6 scfNaturalGas}\right) = 0.015 lb / hr$$

Process Emission Factor for brazing rods = 0.028 lb PM_{10} / lb brazing rods [Same as for auto brazer in Item 1 above]

Process PM_{10} PTE for brazing rods = $$(26)\left(\frac{0.11 lbBrazingRings}{hr}\right)\left(\frac{0.028 lbPM_{10}}{lbBrazingRing}\right) = 0.080 lb / hr$$

Total PM_{10} PTE = 0.015 lb/hr + 0.080 lb/hr = 0.095 lb/hr

The total PM_{10} PTE is much less than 0.5 lb/hr, so these brazers are exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation.

With particulate emissions this low, it is reasonable to assume that these brazers will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

Since these brazers burn natural gas exclusively, they are exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from these brazers are included in Attachment E calculations of total VOC emissions for the installation.

3) Three touch up paint stations, fugitive (EP-17)
The total Maximum Hourly Design Rate for all of these stations taken together is 0.055 gal/hr. Assume a 50% transfer efficiency rate. The paint used is "Custom Aerosol Packaging's Touch-Up Spray Paint 8983020 Textured Sterling Gray". It has a density of 6.59 lb/gal, and volatile organic compounds constitute 3.22 lb/gal of this, so worst-case (no water) solids content is 6.59 lb/gal – 3.22 lb/gal = 3.37 lb/gal. Calculate emissions as follows.

$$E = \left(\frac{0.055 gal}{hr}\right)\left(\frac{3.37 lbPM_{10}}{gal}\right)(100\% - 50\%) = 0.093 lbPM_{10} / hr$$

This is much less than 0.5 lb/hr, so these stations would be exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation even if they weren't already exempt , per §(1)(B)7, because they are fugitive sources.

With particulate emissions this low, it is reasonable to assume that these stations will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

The VOC emissions from these stations are included in Attachment E calculations of total VOC emissions for the installation.

4) Three solvent wipe stations, fugitive (EP-19)
These solvent wipe stations emit volatile organic compounds, but no particulate matter. Their VOC emissions from the solvent used (Zep's Big Orange) are included in Attachment E calculations of total VOC emissions for the installation.

5) Auto brazer, A-Coil Line – AB01, natural gas, 1.575 MMBtu (EP-21)
The Maximum Hourly Design Rate for this auto brazer is 1.575 MMBtu/hr natural gas, 15 lb brazing rings/hr, and 0.23 gal liquid brazing flux/hr. It can emit PM_{10} from natural gas consumption (combustion emissions) and from brazing ring consumption (process emissions). The liquid brazing flux used is The Gasflux Company's Type "W" Liquid Gasflux. According to the manufacturer, the product burns off completely during use, so it is ignored in these calculations.

Combustion Emission Factor for natural gas = 7.6 lb PM_{10} / 10^6 scf [Same as for auto brazer in Item 1 above]
Heating Value of natural gas = 1050 Btu/scf.
Combustion PM_{10} PTE =

$$\left(\frac{1.575 MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)\left(\frac{7.6 lbPM_{10}}{10^6 scfNaturalGas}\right) = 0.011 lb / hr$$

Process Emission Factor for brazing rings = 0.028 lb PM_{10} / lb brazing rings [Same as for auto brazer in Item 1 above]

$$\text{Process } PM_{10} \text{ PTE for brazing rings} = \left(\frac{15 lb BrazingRings}{hr}\right)\left(\frac{0.028 lb PM_{10}}{lb BrazingRing}\right) = 0.42 lb/hr$$

Total PM_{10} PTE = 0.011 lb/hr + 0.42 lb/hr = 0.43 lb/hr

The total PM_{10} PTE is less than 0.5 lb/hr, so this auto brazer is exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation. The flow rate through the stack for this unit is unknown, but that for a similar unit at Nordyne's Poplar Bluff installation is 3500 ft^3/min. Even assuming a flow rate that is only 10% of the other installations, or 350 ft^3/min, gives an emission of

$$E = \left(\frac{0.43 lb PM}{hr}\right)\left(\frac{7000 grains}{lb}\right)\left(\frac{hr}{60 \min}\right)\left(\frac{\min}{350 ft^3}\right) = 0.14 grain PM / ft^3$$

With particulate emissions this low, it is reasonable to assume that this auto brazer will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to it either.

Since this auto brazer burns natural gas exclusively, it is exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from this auto brazer are included in Attachment E calculations of total VOC emissions for the installation.

6) Four arc welders. (EP-22)
The total Maximum Hourly Design Rate for each of these identical welders is 1.5 lb welding rod/hr. Their electrode type is E6011, and the emission factor the welding rod is 38.4 lb PM_{10} / 1000 lb welding rod. [From Table 12.19-1 in U.S. EPA document AP-42] Calculate emissions in pounds PM per hour for the welders as follows.

$$E = (4)\left(\frac{1.5 lb Welding Wire}{hr}\right)\left(\frac{38.4 lb PM}{10^3 lb Welding Wire}\right) = 0.23 lb PM / hr$$

This is less than 0.5 lb/hr, so the stations are exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation.

The stack flow rate is 9,000 ft^3/min. Calculate emissions in grains per cubic foot as follows.

$$E = \left(\frac{0.23 lb PM}{hr}\right)\left(\frac{7000 grains}{lb}\right)\left(\frac{hr}{60 \min}\right)\left(\frac{\min}{9000 ft^3}\right) = 0.0030 grPM / ft^3$$

Combining this with the other emissions through this stack, which come from the MIG Wire Welders (See Attachments F and G) gives the following total

$$E = 0.0075 grPM / ft^3 + 0.016 grPM / ft^3 + 0.0030 grPM / ft^3 = 0.027 grPM / ft^3$$

With particulate emissions this low, it is reasonable to assume that these welders will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

Chapter 12.19, *Electric Arc Welding*, in U. S. EPA document AP-42 does not mention VOC as an emission of concern. There are no VOC emissions from these welders to include in Attachment E calculations of total VOC emissions for the installation.

7) Three fuel combustion test stations, natural gas, 0.14 MMBtu/hr each and three hot surface igniter testers, natural gas, 0.14 MMBtu/hr each. (EP-23)
Combustion Emission Factor for natural gas = 7.6 lb PM10 / 106 scf natural gas [Same as for auto brazer in Item 1 above] The heating value of natural gas is 1050 Btu/scf. Calculate the PM emissions for each station as follows.

$$E = (6)\left(\frac{0.14 MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)\left(\frac{7.6 lbPM}{10^6 scfNaturalGas}\right) = 0.0061 lbPM / hr$$

This is much less than 0.5 lb/hr, so the stations are exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation.

With particulate emissions this low, it is reasonable to assume that these stations will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

Since these stations burn natural gas exclusively, they are exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from these stations are included in Attachment E calculations of total VOC emissions for the installation.

8) Thirty-five hydraulic presses using no evaporative oil
These units have no known air emissions.

9) Twenty-five resistance welders (four seam, nineteen spot, and two stud), fugitive
There are no known emissions factors for resistance welding. U.S. EPA document AP-42 confirms this, as does the EPA's Factor Information Retrieval (FIRE) Data System. The American Welding Society's Fact Sheet No. 21 on Resistance Spot Welding states that "unlike many other welding or cutting processes", resistance welding produces "little fumes" The TWI World Center for Materials joining Technology states in their document on resistance spot welding that "little fume is produced but may need attention when welding coated steels or when oils or organic materials are present". These resistance welders are used on uncoated aluminum.

10) Coil leak test using helium gas
The only air emission from this is helium, which is not regulated.

11) Foam packaging machine, fugitive
This unit is completely sealed during use. The machine uses Instapak Components "A" and "B". Component "A" is 100% polymeric methylene diphenylene diisocyanate (polymeric MDI), which is a HAP, but is non-volatile. Component "B" is 2.5% by weight amine catalyst and is non-volatile. Calculations using the method in *MDI/Polymeric MDI Emissions Reporting Guidelines for the*

Polyurethane Industry, developed by the Alliance for the Polyurethane Industry (API) in 2002, show that the amount of MDI ($4.15X10^{-6}$ lb/yr actual in this case) escaping such a unit is insignificant.

12) Non-presses using no evaporative oil (formers/rollers for pipes, seams, and locks; swedgers; and flue flare)
The flue flare is control equipment. The rest of these units have no known air emissions.

13) Two air handlers, natural gas, 2.5 MMBtu/hr
Combustion Emission Factor for natural gas = 7.6 lb PM_{10} / 10^6 scf natural gas [Same as for auto brazer in Item 1 above]
Heating Value of natural gas = 1050 Btu/scf.
PM_{10} PTE =

$$(2)\left(\frac{2.5MMBtu}{hr}\right)\left(\frac{10^6\,Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM_{10}}{10^6\,scfNaturalGas}\right)=0.036lb/hr$$

This is much less than 0.5 lb/hr, so these air handlers are exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation.

With particulate emissions this low, it is reasonable to assume that these air handlers will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

Since these air handlers burn natural gas exclusively, they are exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from these air handlers are included in Attachment E calculations of total VOC emissions for the installation.

14) Two air handlers, natural gas, 1.9 MMBtu/hr
Combustion Emission Factor for natural gas = 7.6 lb PM_{10} / 10^6 scf natural gas [Same as for auto brazer in Item 1 above]
Heating Value of natural gas = 1050 Btu/scf.
PM_{10} PTE =

$$(2)\left(\frac{1.9MMBtu}{hr}\right)\left(\frac{10^6\,Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050Btu}\right)\left(\frac{7.6lbPM_{10}}{10^6\,scfNaturalGas}\right)=0.028lb/hr$$

This is much less than 0.5 lb/hr, so these air handlers are exempt from 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, per §(1)(B)11 of that regulation.

With particulate emissions this low, it is reasonable to assume that these air handlers will never exceed the 20% opacity limit in 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, so that regulation is not relevant to them either.

Since these air handlers burn natural gas exclusively, they are exempt from 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds,* per §(1)(A)2.

The VOC emissions from these air handlers are included in Attachment E calculations of total VOC emissions for the installation.

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, applies to the Seven Adhesive Application Stations (EU0010). See item 2) in the *Other Regulatory Determinations* portion of this Statement of Basis for an explanation.

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*, applies to the Furnace Final Testing Station (EU0120). See item 3)a) in the *Other Regulatory Determinations* portion of this Statement of Basis for an explanation.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

1) 10 CSR 10-6.100, *Alternate Emission Limits*, does not apply to this installation because it is in an ozone attainment area.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

1) Construction Permit 0593-009, issued May 26, 1993, revised July 5, 1994. The only special conditions in this permit applied to equipment since removed from the installation. The applicable regulations cited in this construction permit, or regulations superseding them, are addressed in this operating permit. Therefore this construction permit is now irrelevant.
2) Construction Permit 0994-009, issued August 15, 1994, revised October 17, 1995. The only special conditions in this permit are for VOC emissions from a touchup paint station since removed from the installation. This operating permit has a plant wide limitation on VOC emissions. The applicable regulations cited in this construction permit, or regulations superseding them, are addressed in this operating permit. Therefore this construction permit is now irrelevant.
3) Construction Permit 0698-027, issued May 26, 1998. This construction permit contains no special conditions. The applicable regulations cited in this construction permit, or regulations superseding them, are addressed in this operating permit, except for 40 CFR Part 60 Subpart TT. The equipment to which Subpart TT applied was dismantled before the previous operating permit was issued. Therefore this construction permit is now irrelevant.
4) Construction Permit 0599-017, issued April 23, 1999, revised April 7, 2004. This construction permit contains no special conditions. The applicable regulations, or regulations superseding them, are addressed in this operating permit. Therefore this construction permit is now irrelevant.
5) Construction Permit 032004-008, issued February 6, 2004. The only special condition in this permit, requiring the removal of equipment, has been met. The applicable regulations, or regulations

superseding them, are addressed in this operating permit. Therefore this construction permit is now irrelevant.

New Source Performance Standards Applicability
None of the NSPS standards apply to this installation. Metal coil surface coating equipment permitted by Construction Permit 0994-009 was subject to 40 CFR Part 60 Subpart TT, *Standards of Performance for Metal Coil Surface Coating*. However, this equipment was dismantled even before the previous operating permit was issued.

Maximum Available Control Technology Applicability
The installation does not emit any single hazardous air pollutant (HAP) in an amount greater than 10 tons per year nor does the installation emit any combination of HAP in an amount greater than 25 tons per year. Therefore, MACT regulations are not applicable to this installation.

National Emission Standards for Hazardous Air Pollutants Applicability
In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, *Asbestos Abatement*, 643.225 through 643.250; 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*; Subpart M, *National Standards for Asbestos*; and 10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption* apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

None of the other NESHAP standards apply to this installation.

Other Regulatory Determinations

1) 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*
   Per §(3)(A), this regulation does not apply to the Furnace Final Testing Station (EU0120) because its primary purpose is not to produce steam, hot water or hot air. Its primary purpose it to test the finished product, which just happens to be a furnace.

2) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
   a) This regulation applies to the Seven Adhesive Application Stations (EU0010). The Maximum Hourly Design Rate for each of these units is 0.64 gal/hr, so their total MHDR is 4.48 gal/hr. The adhesive used is "Kingo Duct Liner Adhesive 10-595. It has a density of 8.71 lb/gal and is 40.65% volatiles by weight, so its solids content = (100% - 40.65%) X (8.71 lb/gal) = 5.17 lb/gal. Even if transfer efficiency were 90%, the stations' potential to emit particulate matter is $\left(\frac{4.48 galAdhesive}{hr}\right)\left(\frac{5.17 lbPM}{gal}\right)(100\% - 90\%) = 2.32 lbPM / hr.$ With such a large PTE, it is possible that these stations could exceed the opacity limit of 20%. This regulation, unlike 10

CSR 10-6.400 does not contain an exemption for fugitive sources. Therefore it is included in this permit.

b) This regulation does not apply to Evaporative Lubricating Oil Use (EU0020 through EU0090). Evaporative lubricating oil does not contain particulate matter.

c) This regulation is not relevant to the MIG Wire Welders (EU0100 and EU0110). Their particulate emissions are so low that it is reasonable to assume that they will never exceed the 20% opacity limit. See Attachments F and G in this permit for the calculation.

d) This regulation is not relevant to the Furnace Final Testing Station (EU0120). Its particulate emissions are so low that it is reasonable to assume that it will never exceed the 20% opacity limit. See 2)c) below for the calculation.

e) This regulation is not relevant to the Eighty-three Space Heaters (EU0130), Water Heater in South Mop Room (EU0140), Water Heater in Northwest Storage Area (EU0150), and Two Water Heaters Above Front Office (EU0160). Their particulate emissions are so low that it is reasonable to assume that they will never exceed the 20% opacity limit. See Attachment H in this permit for the calculation.

3) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

a) This regulation applies to the Furnace Final Testing Station (EU0120). Unlike the space and water heaters, this station is not exempt because it burns natural gas exclusively. It also burns fuel oil.

b) Per §(1)(A)2 of the regulation, the Eighty-three Space Heaters (EU0130), Water Heater in South Mop Room (EU0140), Water Heater in Northwest Storage Area (EU0150), and Two Water Heaters Above Front Office (EU0160) are exempt because they burn natural gas exclusively.

4) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
This regulation does not apply to the following sources in this operating permit for the reasons given:

a) Per §(1)(B)7 of the regulation, the Seven Adhesive Application Stations (EU0010) are exempt because they are fugitive sources.

b) Emissions from Evaporative Lubricating Oil Use (EU0020 through EU0090) do not contain particulate matter.

c) Per §(1)(B)11 of the regulation, the Furnace Final Testing Station (EU0120) is exempt because its potential to emit particulate matter is less than 0.5 lb/hr. The PM emission factor for natural gas combustion given in Table 1.4-2 of U.S. EPA document AP-42 is 7.6 lb PM/10^6 scf natural gas. The heating value of natural gas is 1050 Btu/scf. The PM emission rate for this emission unit when burning natural gas is calculated as follows.

$$\left(\frac{0.14 MMBtu}{hr}\right)\left(\frac{10^6 Btu}{MMBtu}\right)\left(\frac{scfNaturalGas}{1050 Btu}\right)\left(\frac{7.6 lbPM}{10^6 scfNaturalGas}\right) = 0.0010 lbPM / hr$$

The PM emission factor for natural gas combustion given in Table 1.3-2 of U.S. EPA document AP-42 is 1.3 lb PM/10^3 gal distillate fuel oil. The heating value of distillate fuel oil is 5.9 MMBtu/bbl. The PM emission rate for this emission unit when burning distillate fuel oil is calculated as follows.

$$\left(\frac{0.14 MMBtu}{hr}\right)\left(\frac{bblFuelOil}{5.9 MMBtu}\right)\left(\frac{50 galFuelOil}{bblFuelOil}\right)\left(\frac{1.3 lbPM}{10^3 galFuelOil}\right) = 0.0015 lbPM / hr$$

Note that the barrel used in this calculation is the U. S. petroleum barrel of 50 gallons, not the usual U. S. liquid barrel of 31.5 Gallons.

The results of both calculations are much less than 0.5 lb/hr.

d) Per §(1)(B)6 of the regulation, the Eighty-three Space Heaters (EU0130), Water Heater in South Mop Room (EU0140), Water Heater in Northwest Storage Area (EU0150), and Two Water Heaters Above Front Office (EU0160) are exempt because they burn fuel for indirect heating. These units are subject to 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, instead.

5) Chapter 12.19, *Electric Arc Welding*, in U. S. EPA document AP-42 does not mention VOC as an emission of concern for electric arc welding. There are no VOC emissions from the MIG wire welders (EU0100 and EU0110) to include in Attachment E calculations of total VOC emissions for the installation.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

1) The specific pollutant regulated by that rule is not emitted by the installation.
2) The installation is not in the source category regulated by that rule.
3) The installation is not in the county or specific area that is regulated under the authority of that rule.
4) The installation does not contain the type of emission unit which is regulated by that rule.
5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

Cheryl Steffan

Cheryl Steffan
Environmental Engineer